AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing Of Claims:

1. (Currently amended) A signal transmission method, comprising:

providing ~~in~~ a wireless base station system, wherein the ~~said~~ wireless base station system comprising;

a first base station,

a second base station, and

a wireless networks control device, wherein the first base station is a local base station from a centralized base station system, and the second base station is a remote end base station from another remote end base station system, the first base station and the second base station are able to jointly share channel processing task of a cell of the first base station;~~, the method comprising~~

in the downlink direction, transmitting, by the wireless network control device, a part or all of downlink data frames to the base station to which their channel processing relates for processing;

receiving, by the first base station, corresponding downlink wireless signals from the base station which the channel processing of the cell's downlink data frames relates to; ~~and~~

transmitting, by the first base station, the downlink wireless signals for the cell; ~~and~~

in the uplink direction, receiving, by the first base station, uplink wireless signals of the cell;

distributing, by the first base station, a part or all of the uplink wireless signals to the base station to which their channel processing relates for processing;

receiving, by the wireless network control device, corresponding uplink data frames from the base station which the channel processing of the cell's uplink wireless signal relates to; and

wherein at least one of the base station which the channel processing of the downlink data frames relates to ~~, or~~ and the base station which the channel processing of the uplink wireless signals relates to comprises ~~at least~~ the second base station.

2. (Original) The method of claim 1, further comprising a step of transmitting channel configuration information in the cell from the first base station to the second base station sharing the channel processing task.

3. (Original) The method of claim 1, wherein the base station which the channel processing of the downlink data frames relates to and the base station which the channel processing of the uplink wireless signals relates to both comprise the second base station.

4. (Cancelled).

5. (Currently amended) The method of claim 1, ~~further comprising a step of:~~ when the base station, which the channel processing of the uplink wireless signals relates to, comprises ~~more than one~~ both of the first base station and the second base station~~s~~, further comprising a step of merging the uplink data frames belonging to the same cell ~~are merged~~ into one flow of uplink data of the cell in the wireless network control device.

6. (Currently amended) The method of claim 1, ~~further comprising a step of:~~ when the base station, which the channel processing of the downlink data frames relates to, comprises more than one base stations, further comprising a step of separating the downlink data frames

~~are separated~~ in the wireless network control device in order to be transmitted to corresponding base stations.

7. (Currently amended) The method of claim 1, ~~further comprising a step of:~~ when the base station, which the channel processing of the downlink data frames relates to, comprises more than one base stations, further comprising a step of transmitting, by the wireless network control device, ~~transmit~~ the same downlink data frames to the base stations.

8. (Currently amended) The method of claim 1, ~~further comprising a step of:~~ when the base station, which the channel processing of the downlink data frames relates to, or the base station, which the channel processing of the uplink wireless signals relates to, or the channel processing task shared by the base station, changes, further comprising a step of applying signaling ~~is applied~~ to perform synchronous switching between the base station and the wireless network control device.

9. (Currently amended) The method of claim 1, further comprising a step of:

providing configuration information to indicate the correspondence between:

i) the base station which the channel processing of the uplink wireless signals relates to,

ii) the base station which the channel processing of the downlink data frames relates to, and

iii) the cell channel processing task shared by the first base station and the related the base station ~~it~~.